

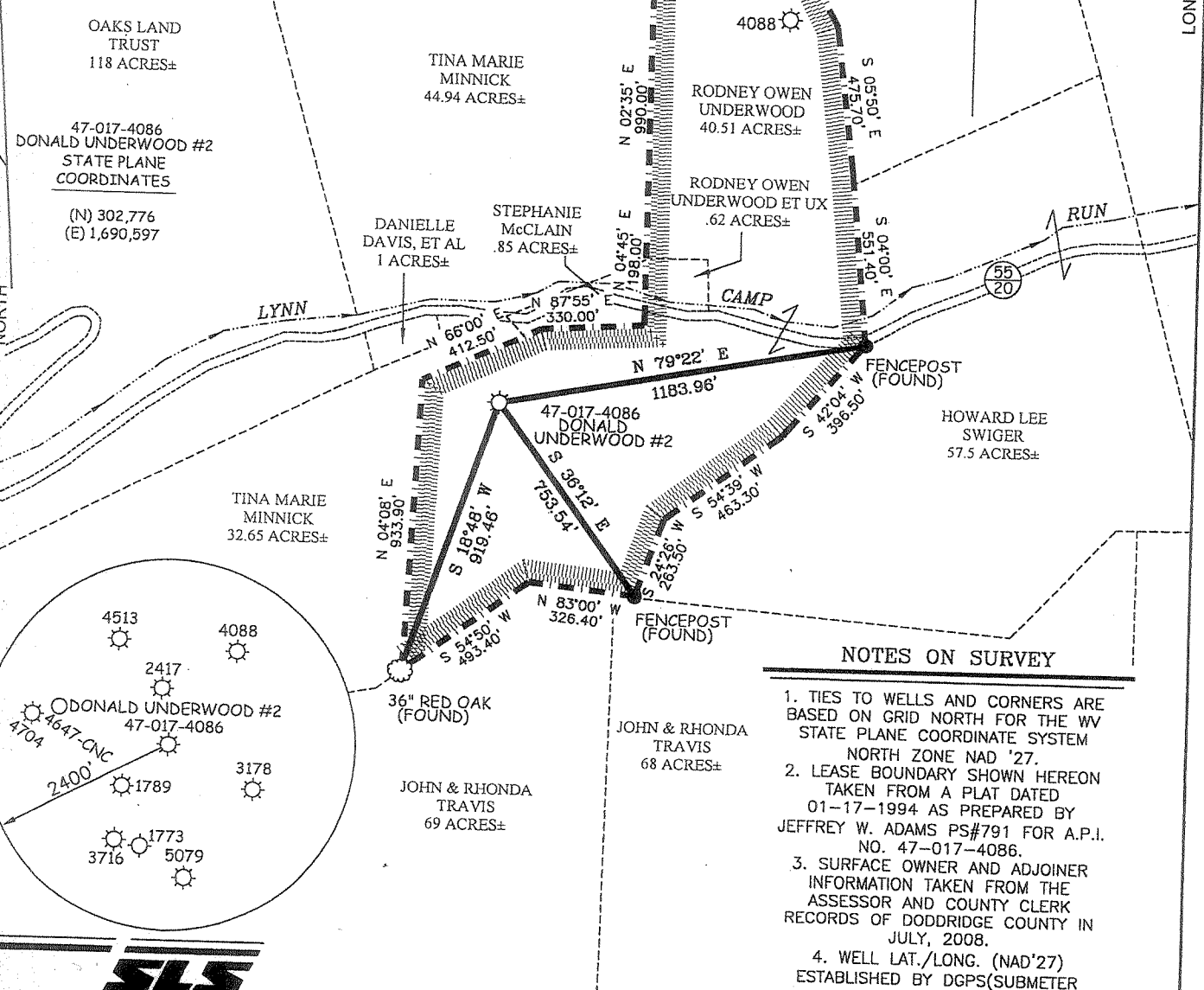
LONG. 80°35'37.5" 2,930'
 LATITUDE 39°20'00"

DONALD UNDERWOOD LEASE

40.5 ACRES±

WELL NO. 2

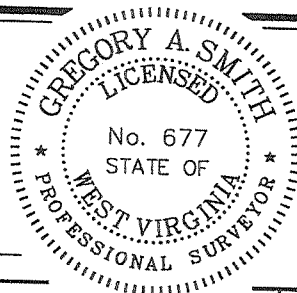
47-017-4086



NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT DATED 01-17-1994 AS PREPARED BY JEFFREY W. ADAMS PS#791 FOR A.P.I. NO. 47-017-4086.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2008.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE FEBRUARY 9, 20 09
 OPERATORS WELL NO. DONALD UNDERWOOD #2
 API WELL NO. 47 - 017 - 4086
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7124P2(271-74)
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,117' WATERSHED LYNN CAMP RUN
 DISTRICT McCLELLAN COUNTY DODDRIDGE

SURFACE OWNER RODNEY OWEN UNDERWOOD QUADRANGLE SALEM 7.5'
 OWNERSHIP: DONALD L. UNDERWOOD, ET AL ACREAGE 40.51±
 LEASE ACREAGE 40.51±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION GORDON
 ESTIMATED DEPTH 2,950'

WELL OPERATOR PETROLEUM DEVELOPMENT CORP. DESIGNATED AGENT ALAN H. SMITH APR 24 2009
 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330

COUNTY NAME Doddr
 PERMIT 4086 W

1) Date: January 20, 1994
2) Operator's well number
 D. Underwood #2
3) API Well No: 47 - 017 - 4086
 State - County - Permit

Office of Oil & Gas

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
- (a) Name Donald L. & Thelma Underwood
 - Address Rt. 2, Box 134
Salem, WV 26426
 - (b) Name _____
 - Address _____
 - (c) Name _____
 - Address _____
- 5) (a) Coal Operator:
- Name _____
 - Address _____
 - (b) Coal Owner(s) with Declaration
 - Name No declaration on record
 - Address _____
 - Name _____
 - Address _____
 - (c) Coal Lessee with Declaration
 - Name _____
 - Address _____
- 6) Inspector Mike Underwood
- Address Rt. 2, Box 135
Salem, WV 26426
 - Telephone (304)-782-1043

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

XX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:

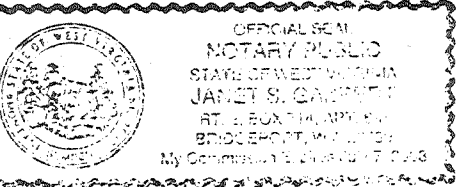
- _____ Personal Service (Affidavit attached)
- _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator PETROLEUM DEVELOPMENT CORPORATION
 By: [Signature]
 Its: P O Box 26
 Address Bridgeport, WV 26330
 Telephone 304-842-6256



Subscribed and sworn before me this 20th day of January, 1994

Janet S. Gilbert Notary Public
 My commission expires July 7, 2003

DONALD UNDERWOOD LEASE

40.5 ACRES± WELL NO. 2 47-017-4086

OAKS LAND TRUST
118 ACRES±

TINA MARIE MINNICK
44.94 ACRES±

47-017-4086
DONALD UNDERWOOD #2
STATE PLANE
COORDINATES

(N) 302,776
(E) 1,690,597

DANIELLE DAVIS, ET AL
1 ACRES±

STEPHANIE McCLAIN
.85 ACRES±

RODNEY OWEN UNDERWOOD
40.51 ACRES±

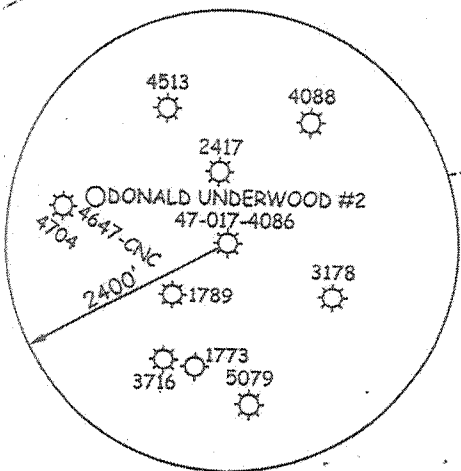
RODNEY OWEN UNDERWOOD ET UX
.62 ACRES±

HOWARD LEE SWIGER
57.5 ACRES±

TINA MARIE MINNICK
32.65 ACRES±

JOHN & RHONDA TRAVIS
68 ACRES±

JOHN & RHONDA TRAVIS
69 ACRES±



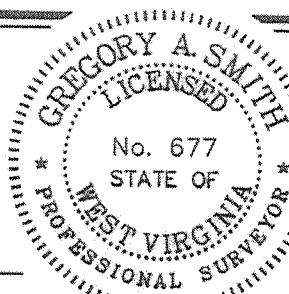
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P.S. 677

Gregory A. Smith



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DATE FEBRUARY 9, 20 09

OPERATORS WELL NO. DONALD UNDERWOOD #2

API WELL NO. 47 - 017 - 4086

STATE COUNTY PERMIT

CANCELLED

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS



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WELL OPERATOR PETROLEUM DEVELOPMENT CORP. DESIGNATED AGENT ALAN H. SMITH
ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 28330 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 28330

05/02/2014

COUNTY NAME
PERMIT

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: UNDERWOOD, DONALD/ Operator Well No.: UNDERWOOD #2

LOCATION: Elevation: 1,120.00 Quadrangle: SALEM

District: MCCLELLAN County: DODDRIDGE
Latitude: 2650 Feet South of 39 Deg. 20Min. Sec.
Longitude 2950 Feet West of 80 Deg. 35 Min. Sec.

Company: PETROLEUM DEVELOPMENT COR
P. O. BOX 26
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD
Permit Issued: 01/26/94
Well work Commenced: 03/15/94
Well work Completed: 03/22/94
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 5301'
Fresh water depths (ft) _____
112; 230; 1895
Salt water depths (ft) _____
n/a
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 848-856

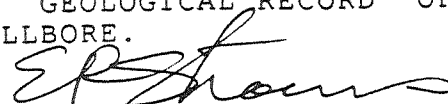
Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	173'	173'	105 sks
8 5/8"	1829'	1829'	454 sks
4 1/2"	5270'	5270'	430 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5167-5169
Gas: Initial open flow 133 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 180 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 1000 psig (surface pressure) after 72 Hours

Second producing formation Gordon Pay zone depth (ft) 2916-2958
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow co-mingled MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.



For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns
Date: April 14, 1994

APR 28 1994

RONALD UNDERWOOD #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
st	Benson	16 (5167' - 5169')	50	400	500	54
nd	Gordon	12 (2916' - 2958')	50	470	500	59

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
B - GL	0	10	1/4" water @ 112'
and, shale, RR	10	1922	Damp @ 230'
axton	1922	2036	Damp @ 1895'
and, shale	2036	2100	Coal @848' - 856'
ig Lime	2100	2168	
and, shale	2168	2172	
ig Injun	2172	2274	
and, shale	2274	2392	
eir	2392	2514	gas chk @2411' 4/10 thru 1"/water
and, shale	2514	2608	
erea	2636	2636	
and, shale	2636	2910	
ordon	2910	2962	
and, shale	2962	3160	
th	3160	3227	gas chk @3189' 10/10 thru 2"/water
and, shale	3227	3488	
arren	3488	3596	gas chk @3499' 12/10 thru 2"/water
and, shale	3596	3611	
peechley	3611	3663	
and, shale	3663	3994	
alltown	3994	4322	gas chk @4213' 14/10 thru 2"/water
and, shale	4322	4348	
radford	4348	4450	gas chk @4773' 14/10 thru 2"/water
and, shale	4450	4884	gas chk @4993' 16/10 thru 2"/water
iley	4884	5116	gas chk @5147' 8/10 thru 2"/water
and, shale	5116	5174	gas chk @5179' 10/10 thru 2"/water
enson	5174	5218	gas chk @TD 10/10 thru 2"/water
and, shale		5303	Drillers TD
		5301	gas chk @collars 10/10 thru 2"/water Logger TD

5178/1